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08/894,788 08/27/97 GIACOMONI P 05725.0213

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ART UNIT PAPER NUMBER

Please find below and/or attached an Office communication concerning this application or pr ceeding.

**Commissioner of Patents and Trademarks** 

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## Office Action Summary

Application No. 08/894,788

Applicant(s)

Paolo Giacomoni

Examiner

Lakshmi Channavajjala

Group Art Unit 1615



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--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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**DETAILED ACTION** 

1. The request filed on 2-9-2000 for a Continued Prosecution Application (CPA) under 37

CFR 1.53(d) based on parent Application No. 09/894,788 is acceptable and a CPA has been

established. An action on the CPA follows.

Claims 31-38, 40-54 and 56-66 are currently pending.

Claim Objections

2. Claim 31 is objected to because of the following informalities: on line 3 of claim 31, the

word cosmetic is not complete as there is a break in the sentence. Appropriate correction is

required.

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in

section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the

manner in which the invention was made.

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Claims 31-38, 40-54 and 56-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over

1) Hahn et al in view of Williamson et al; <u>or</u> 2) Hahn et al in view of Wahl et al; <u>or</u> 3) Hahn et al in view of Williamson et al and Wahl et al.

Hahn et al teaches a number of substances which can cause skin irritation, when applied topically. The substances includes vehicles in which active ingredients are formulated (carriers), solvents, detergents, fragrances, propellants, salicylic acid derivatives, retinoids etc., cause irritation which ranges from mild irritation to severe dermatitis conditions. Further, Hahn et al teaches that some people with sensitive skin has an inherent predisposition to skin irritants, for example, people with skin conditions such as psoriasis, contact dermatitis etc., (see col. 3, lines 27-43). Hahn et al teaches the theory that an anti-irritant, to counteract the irritants can be used together with an irritant, in the same composition. However, Hahn et al teaches strontium cation as an anti-irritant in the formulation (see entire document, particularly, cols. 1-4, 10 and 11), and not nitric oxide (NO) synthase inhibitor, as claimed in the instant invention.

Williamson et al teaches various chronic and acute inflammatory conditions such as dermatitis, sunburns, caused by various chemicals and teaches administration of NO synthase inhibitors, methyl-, dimethyl or amino substituted guanidines (column 1-3). Williamson et al also recognizes N-monomethyl-L-arginine, as a NO synthase inhibitor. Williamson et al teaches dermatitis, drug reactions, sunburn, insect bites, burns (thermal, chemical and electrical) (column 3, lines 38-45). Williamson et al also teaches pharmaceutically acceptable diluents and carriers (see col. 11, lines 35-39), which according to Hahn et al are capable of producing skin irritation.

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Accordingly, it is the opinion of the examiner that a skilled artisan would be motivated to incorporate any anti-irritant, in the place of strontium cation in the teachings of Hahn et al, and still be able to counteract the irritation. Because the NO synthase inhibitors of Williamson et al are capable of inhibiting chronic and acute dermatitis, a skin condition caused by chemicals (which according to Hahn et al is caused due to irritation by various chemical substances), a skilled artisan would be motivated to substitute the strontium cation of Hahn et al with NO synthase inhibitors of Williamson et al, with an expectation to inhibit the irritation by any of the above substances of Hahn et al. Williamson does not teach topical application of nitric oxide synthase inhibitor. However, applying nitric oxide synthase inhibitors of Williamson et al as a topical formulation would have been obvious from the teachings of Hahn et al, or alternatively, it is within the scope of a skilled artisan at the time of the instant invention to use topical formulations of nitric oxide synthase inhibitors as first line of choice, with an expectation to produce a local effect.

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Wahl et al (hereafter Wahl) teaches treating chronic inflammatory conditions such as psoriasis (paragraph bridging cols. 3 and 4), by administering the specific nitric oxide synthase inhibitors of the instant claims (see col. 3, lines 39-68) by several routes including topical application (col. 6, lines 53-65). Thus Wahl et al teaches the same skin conditions which have a predisposition to be irritated upon exposure to common cosmetic and pharmaceutical products of Hahn et al and suggests topical application of nitric oxide synthase inhibitors. Therefore, it would have been obvious for a skilled artisan at the time of the instant invention to use the nitric oxide

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synthase inhibitors of Wahl in the topical composition of Hahn et al, with an expectation to inhibit the skin irritation caused by the various chemicals (Williamson et al and Hahn et al).

## Response to Arguments

4. Applicant's arguments filed 2-9-2000 have been fully considered but they are not persuasive.

Applicants urge that the combination of teachings of Hahn et al and Williamson et al lacks any motivation as the examiner fails to show how to make a particular composition containing an irritant and anti-irritant (or at least a class of anti-irritants) which is obvious. However, it is the examiner's position that the anti-irritant together with the irritants (of Hahn et al), can be taken as a general theory for having an irritant and anti-irritant in the same composition. Strontium of Hahn et al reads on a class of anti-irritants. The motivation to replace the strontium of Hahn et al with the nitric oxide synthase inhibitors of Williamson et al comes from the fact that both the references are directed to teaches the skin conditions such as dermatitis caused by exposure to chemicals and that Williamson et al teaches nitric oxide synthase inhibitors as a treatment.

Further, applicants argue that Williamson et al does not teach topical application and instead teaches only oral, intraperitoneal and other routes of administering nitric oxide synthase inhibitors. However, as mentioned above, applying nitric oxide synthase inhibitors of Williamson et al as a topical formulation would have been obvious either from the teachings of Hahn et al or it is within the scope of a skilled artisan at the time of the instant invention to use topical

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formulations of nitric oxide synthase inhibitors as first line of choice, with an expectation to produce a local effect. Further, as discussed above Wahl suggests topical application of the claimed nitric oxide synthase inhibitors. Finally, with respect to the composition claims "topically applied" is a future intended use and carries no patentable distinction.

## Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is (703) 308-2438. The examiner can normally be reached Monday through Friday from 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page, can be reached on (703) 308-2927. The fax number for this Group is (703) 305-5408.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. § 132 or which otherwise require a signature, may be used by the applicant ans should be addressed to [thurman.page@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of confidentiality requirements of U.S.C. § 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703-305-2351)

Lakshmi S. Channavajjala

04/17/2000

Gollamudi S. Kishore, PhD

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